

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

QUANTA SERVICES, INC., *et al.*, §
§
Plaintiffs, §
VS. § CIVIL ACTION NO. 4:11-CV-2398
§
LIVELINE SOLUTIONS, INC., *et al.*, §
§
Defendants. §

MEMORANDUM AND ORDER

I. INTRODUCTION

The plaintiffs, Quanta Services, Inc., and Quanta Services of Canada, LTD (“Quanta”) brought this suit against defendants, Liveline Solutions, Inc., Larry Ewert and Nathan Ewert (“Liveline”) for infringement of its U. S. Patent No. 5,538,207 (“the ‘207 patent”). The matter most immediately before the Court concerns a dispute over the interpretation of disputed terms and phrases in that patent. Hence, the Court is called to review the proposed claim constructions proffered by Quanta and Liveline and resolve the disputes. *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996).

II. BACKGROUND

The ‘207 patent was filed in January of 1995 and issued in July of 1996. The Patent and Trademark Office (“PTO”) recognized Dan O’Connell and Cliff Devine as the inventors.¹ The ’207 patent has a total of 35 claims. Claim 1, which is the only independent claim, recites:

¹ The Court addressed a motion to intervene filed by counsel for Liveline in behalf of Susan K. Dyer, who claims to be a co-inventor of the ‘207 patent. The Court need not address the merits of Ms. Dyer’s claim in order to resolve the dispute between Quanta and Liveline.

1. A boom-mountable robotic arm for temporarily supporting a conductor, comprising:

- (a) a boom adaptor connectable to the boom of a service vehicle;
- (b) an upper frame pivotably connected to said boom adaptor;
- (c) a first telescoping arm coupled to a first end of said upper frame and movable relative to said upper frame between retracted and extended positions;
- (d) a first insulator mounted on said telescoping arm;
- (e) a conductor holder mounted on said first insulator for releasably coupling said robotic arm to said conductor; and
- (f) adjustment means for adjusting the angular position of said upper frame relative to said boom adaptor.

Hence, the ‘207 patent claim to invent a “Boom-Mountable Robotic Arm” for the purpose of temporarily supporting energized power lines to enable repair or replacement of transmission poles, crossarms, insulators and the like. It features a robotic arm that may be operable by remote control. It includes a boom adaptor sleeve for receiving the upper end of the boom, a frame pivotably coupled to the boom adaptor, and at least one telescoping arm coupled to the frame and adjustable between a retracted position and an extended position coaxial with the frame. An insulator stack and conductor holder are mounted on each of the telescoping arm(s) and the frame for releasability engaging a corresponding energized conductor. The angular position of the frame relative to the boom adaptor is adjustable to permit leveling of the robotic arm irrespective of the boom angle. *See [Abstract, ‘207 patent].*

III. THE DISPUTED TERMS AND PHRASES

The disputed means-plus-function aspect and the disputed terms and phrases to be interpreted are: (a) telescoping arm; (b) moveable; (c) retracted and extended positions; (d) movable relative to said upper frame between retracted and extended positions; (e) adjustment

means for adjusting the angular position of the upper frame relative to said boom adaptor; (f) upper frame; and (g) boom adaptor. The parties' joint construction chart presents competing interpretation as follows:

Disputed Term	Quanta's Proposed Construction	Liveline's Proposed Construction
telescoping arm	device coupled to a main structure, one at least partly inside the other, and which is moveable relative to the main structure	a tubular structure slidably nested within the upper frame, the lateral position of the exposed end of telescoping arm relative to the upper frame being adjustable independently of an remotely-controllable independently of the position of the upper frame, while supporting an energized conductor
boom adaptor	device for connecting an element to a boom	a sleeve designed to fit over the upper end of the boom of a service vehicle and to rotatably connect to the upper frame
upper frame	upper main structure to which other elements may be coupled	tubular structure rotatably connected to the boom adaptor, the angular position of the upper frame relative to the boom adaptor being adjustable and remotely-controllable by a leveling arm extending between the upper frame and a collar on the boom adaptor, while supporting an energized conductor
movable	that can be moved	slidable within the upper frame like the cylindrical sections of a hand telescope, the sliding movement of the telescoping arm being adjustable independently of and remotely-controllable independently of the position of the upper frame, while supporting an energized conductor
retracted and extended positions	first and second positions relative to a reference position, with the first position closer to the reference position than the second position	“retracted position”: the telescoping arm is almost fully nested within the upper frame, with only an insubstantial portion of the telescoping arm being in a position extending laterally and coaxially beyond the end of the upper frame “extended position”: a substantial portion of the telescoping arm is in a position extending laterally and coaxially beyond the end of the upper frame, with only an insubstantial portion being nested within the upper frame
movable relative to said upper frame between retracted and extended positions	that can be moved relative to the upper frame between first and second positions relative to a reference position, with the first position closer to the reference position than the second position	slidable within the upper frame like the cylindrical sections of a hand telescope, the sliding movement of the telescoping arm being adjustable independently of and remotely-controllable independently of the position of the upper frame, while supporting an energized conductor, between a position in which: (1) the telescoping arm is almost fully nested within the upper frame, with only an insubstantial portion of the telescoping arm being in a position extending laterally and coaxially beyond the end of the upper frame; and (2) a position in which a substantial portion of the telescoping arm is in a position extending laterally and coaxially beyond the end of the upper frame, with only an insubstantially portion of the telescoping arm being nested within the upper frame
adjustment means for adjusting the angular position of the upper frame relative to said boom adaptor	Structure: leveling arm Function: for adjusting the angular position of said upper frame relative to said boom adaptor	Structure: (1) an adjustable length leveling arm extending between the boom adaptor and the upper frame; (2) coupled to the boom adaptor by means of a collar; (3) with extension and retraction of leveling arm being actuated by a hydraulic cylinder; and (4) with actuation of hydraulic cylinder operable by remote control. Function: for adjusting the angular position of said upper frame relative to said boom adaptor

IV. PRINCIPLES OF CONSTRUCTION

To ascertain the scope and meaning of challenged claims, a court looks to the words of the claims themselves, the specifications, the prosecution history if necessary, and any relevant extrinsic evidence. *Chicago Bd. Options Exch., Inc. v. Int'l Sec. Exch., LLC* 677 Fed. 3d 1361 (2012); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315-17 (Fed. Cir. 2005)(en banc). A court starts by attributing the ordinary and customary meanings to a term or phrase. *Phillips*, 415 F.3d 1312-13. In doing so, courts are saying that a person of ordinary skill in the art would have read the terms in this wise at the time of the invention. *Id.*

The claim language rules, and is examined in the context of the specification for a proper understanding of a term's use. The specification provides the context for examining a claim. See *College Net, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1231 (Fed. Cir. 2005). However, disclosed embodiments of the invention, that describe preferences, should not be used to limit a claim's scope improperly. *Phillips*, 415 F.3d at 1323; *Gemstar-TV Guide Int'l, Inc. v. ITC*, 383 F.3d 1352, 1366 (Fed. Cir. 2004). Likewise, limitations disclosed in a dependent claim, are presumed not to be present in an independent claim. See *Phillips*, 415 F.3d at 1315.

V. ANALYSIS AND DISCUSSION

A. *Telescoping Arm*

Quanta proposes that a “telescoping arm” should be construed to mean “a device coupled to a main structure, one at least partly inside the other, and which is movable relative to the main structure.” In support of this construction, Quanta points the use of the term “telescoping arm” in to Claims 1, 2, 5, 11, 12, 20, 21 and 25, references to it in columns 2, 3, 4, 6, 7 and 8 and to several of the drawings contained in the abstract. Hence, Quanta asserts that the ‘207 patent is

consistent in its use of the term and no limitation from the dependent claims should be imported to Claim 1.

Liveline construes “telescoping arm” to mean “a tubular structure slidably nested within the upper frame, the lateral position of the exposed end of telescoping arm relative to the upper frame being adjustable independently of and remotely – controllable independently of the position.” Liveline argues that contained in the summary invention, field of the invention and in the abstract, the ‘207 patent reveals that the “telescoping arm” has a “remote control means for remotely controlling operation of the actuating means.” This is a limitation, Liveline argues. And, because this “limitation” is stated in the several parts of the patent, the limitation becomes part of the claim. As a result, the patent does not disclose a means for accomplishing the tasks that the invention boasts except by remote control. Hence, Liveline argues that the limitation imported on the claim(s) simply captures what the inventor actually invented. *See Retractable Techs., Inc. v. Becton, Dickinson and Co.* 653 F.3d 1296, 1305 (Fed. Cir. 2011).

The Court notes that Claim 3 of the patent requires that the telescoping arm be operated by remote control. However, that requirement is found in a dependent claim and cannot be automatically imported onto Claim 1 as a limitation. Claim 3 states that “[t]he robotic arm as defined in claim 2, further comprising remote control means for remotely controlling operation . . .” Because the limitation in Claim 3 of the ‘207 patent deals with a preferred embodiment, the limitation is applicable only to Claim 3. Hence, the presumption that the limitation is not present in the independent claim, Claim 1, applies. *See Phillips*, 415 F.3d at 1315.

The Court, therefore, rejects Liveline’s construction because it would either, place limitations on the term as used in the independent claim, or add descriptive terms based on a preferred embodiment and otherwise import limitations from the specification to the independent

claim. “A patentee is entitled to the full scope of his claim(s), irrespective of limitations that may appear in a preferred embodiment. *See Kara Tech., Inc. v. Stamps.com, Inc.*, 582 F.3d, 1341, 1345-49 (Fed. Cir. 2009). Hence, the claims define the invention and to look elsewhere, for purposes other than confirmation, violates the first rule of construction. *See Phillips*, 415 F.3d at 1323.

B. Boom Adaptor

Quantra asserts that the term “boom adaptor” is self-explanatory and requires no construction or definition. However, assuming a definition is necessary, Quantra proffers that a “boom adaptor” is a “device for connecting an element to a boom.” Again, Quantra argues that Liveline, in its proffer, imports a preferred embodiment on to Claim 1. The term “boom adaptor” is found in Claim 1 and dependent Claims 6, 9, 10, 22, 24 and 28. The use of the term “sleeve” is found in the abstract where the term’s use, described as part of the telescoping arm as including “a boom adaptor sleeve . . .”

Liveline defines “boom adaptor” as “a sleeve designed to fit over the upper end of the boom of a service vehicle on one end and to pivotably connect to the upper frame on the other end.” It argues that Claim 1 ought to be limited because of the manner of disclosure in the specification. It asserts that its previous argument concerning a limitation regarding the “telescoping arm” should apply to the term “boom adaptor”. In this regard, Liveline argues that a pivoting limitation is revealed. Hence, that limitation should apply because Quantra criticized the prior art as not having pivoting ability. In addition, Liveline points out that the specification also calls for a boom adaptor that has a sleeve. A sleeve also represents a limitation to Claim 1. Looking to the preferred embodiment, Liveline asserts that “throughout the specification the specification does not show any other kind of connection other than the sleeve type of boom

adaptor.” Finally, Liveline argues against a broader construction of the ‘207 patent claims simply based on “boilerplate” language that teaches a narrower construction. Thus, to permit a broader construction becomes a means to “expand the claim scope.”

The Court is of the view that the “so-called” boilerplate language is not added to a patent to expand its scope. On the contrary, it is designed to prevent the narrowing of claim(s) when that narrower construction defeats the intent of the inventor as expressed in the claim(s). Thus, the Court disagrees with Liveline’s argument that the term “boom adaptor” should be limited by the terms “pivoting” and “sleeve.” Clearly, the terms are found in the specification as preferred embodiments, but cannot be imported onto the claim(s). “A patentee is entitled to the full scope of his claims.” *See Phillips*, 415 F.3d at 1323; *see also Kara Technology*, 582 F.3d at _____. While the specification provides context, the interpretation of a patent is first guided by the text of the claims. *See College.Net, Inc.*, 418 F.3d at 1231. Therefore, the Court, while of the opinion that the term “boom adaptor” does not require a construction it adopts Quantra’s construction it adopts Quantra’s construction of the term.

The Court is of the opinion that it is unnecessary to define or construe the remaining terms, *i.e.*, “upper-frame” “movable”, “retracted and extended positions,” and “movable relative to said upper frame between retracted and extended positions,” in light of the Court’s discussion heretofore.

C. Adjustment Means

The disputed language in Claim 1(f) reads: “adjustment means for adjusting the angular position of said upper frame relative to said boom adaptor.” The parties agree that subpart (f) describes the means for performing a specified function in the claims. They also agree that 35 U.S.C. § 112(6) governs this discussion. In relevant part, Section 112, paragraph 6 provides that

“[a]n element in a chain for a combination may be expressed as a means or step for performing a specified function without the recital of structure . . . in support thereof, and such claim shall be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.” *See* 35 U.S.C. § 112(6).

In sum, the Statute requires that the patentee provide a written description of all possible structures that could be used as means in the claim apparatus or means language or expressions without requiring that all possible structures be disclosed. In the event the patentee chooses the latter, his claim is limited to the means specified in the written description and equivalents. *See Medical Inst. & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003) (citations omitted).

A means analysis requires a two-step process. *See Applied Med. Res. Corp. v. U. S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006). First, a court must identify the claimed function. Next, the Court must identify the corresponding structure in the specification that performs that function. *Id.* The parties agree that the identified function of the “adjustment means” is “for adjusting the angular position of said upper frame relative to said boom adaptor.” However, they disagree on what constitutes the “corresponding structure” of that function.

Quantra asserts that “adjustment means” is actually defined in the specification. Referring to the preferred embodiment, Quantra points to column 4, lines 58-60 which read as follows: “‘*Adjustment means*’, namely an adjustable length leveling arm, extends between boom adaptor and upper frame for adjusting the angular position of the frame” Quantra argues that the structure of the adjustment means is set off by commas and, while the specification goes on to state how the leveling arm works, the structure is limited to the “leveling arm.”

Liveline takes issue with Quantra's limitation on what constitutes the structure. Liveline argues that Quantra's identification of the structure is inadequate because: (a) it fails to account for the role that the hydraulic cylinder and collar play in combination with the leveling arm that adjusts the angle of the upper frame; and (b) the angular position of the upper frame relative to the boom adaptor is operated by remote control without which the function does not exist. In further support of its means plus function limitation, Liveline argues that a single embodiment for performing the function claimed limits all claims to that single embodiment, pointing to language in the patent that a remotely controlled hydraulic cylinder prompts the function, and that no other embodiment is disclosed. Therefore, Liveline asserts operating the "adjustment means" must include a collar, remote control separate pivot joint and a hydraulic cylinder as these disclosures are the sole embodiment revealed in the specification. The Court disagrees with Liveline's argument.

The parties agree that the function of "adjustment means" is for adjusting the angular position of the upper frame relative to the boom adaptor. However, the Court is of the opinion, contrary to Liveline's take, that the "leveling arm" is the corresponding structure that is capable of performing the claimed function. And, like other structural parts to this invention, it does not operate in a vacuum. Here, the "leveling arm" is actuated by a hydraulic cylinder. Thus, it does not perform the leveling function. The fact that the "leveling arm" is linked to the upper frame and the boom adaptor, does not add to or modify the function of the "leveling arm." Nor does the fact that the "leveling arm" may be operated by remote control or aided by a hydraulic cylinder. Without the "leveling arm", the structural support, hydraulic cylinder, collar, remote control or pivot joints, neither separately or collectively, could the function be performed. Therefore, the Court is of the opinion that the structure for "adjustment means" is the "leveling

arm" and equivalents. *See Nomos Corp. v. Brainlab USA, Inc.*, 357 F.3d 1364, 1368 (Fed. Cir. 2004).

It is so Ordered.

SIGNED at Houston, Texas this 30th day of July, 2012.



Kenneth M. Hoyt
United States District Judge